VA MEDICAL CENTER
St. Louis, Missouri

CHIEF OF STAFF **January 26, 2009**

STANDARD OPERATING PROCEDURE NO. 11-082

SUBJECT: **Guidelines for Home Infusion Therapy**

1. **PURPOSE**. To establish a policy and procedure whereby appropriate patients requiring continued infusion therapy (antibiotics, antivirals, total parenteral nutrition, inotropic, and antineoplastic/chemotherapeutic agents) may receive treatment at home via the auspices of the Community Home Care Program.

2. **POLICY**. Patients must have special approval (as delineated in specific sections of this policy) when discharged on home infusion therapy. Veterans Administration (VA) physicians desiring to discharge patients home on intravenous therapy (IV Rx) will adhere to this procedure. Home Infusion Therapy will be available for long-term and short-term course to appropriate patients as described below.

3. **DELEGATION OF AUTHORITY**. The Community Health Nurse Coordinator (CHNC) and ultimately, the Clinical Manager, Home and Community Health are responsible to ensure compliance with this policy and adherence to the protocols. Each staff member has the responsibility to comply with the content of this policy. Service Line Directors/designees are responsible for ensuring compliance with this policy to all responsible staff.

4. **PROCEDURES**. To enroll a VA patient in Home Infusion Therapy (HIT) requires the following process to occur:

a. **The plan of care** and treatment is established and directed by a VA physician.

(1) Orders for receiving home infusion therapy will be in compliance with the standard policies and procedures.

(2) The patient's treating provider will contact the Community Health Nurse Coordinator (CHNC) after determining the patient is a candidate for HIT at least 24 hours prior to discharge to ensure a safe home discharge and adequate planning and care coordination can be completed. Referrals received on Fridays will be processed the next business day to ensure a safe discharge plan for the patient.

(3) The HIT orders must be completed electronically, via GEC consult to the "Community Health Nurse with IV" template in its entirety found in the Computerized Patient Records System (CPRS) and have the approval of the appropriate service prior to discharge.

(4) If durable medical equipment (DME) is required to support the treatment plan, the treating provider/team is responsible to place a CPRS order electronically from Prosthetics. Prosthetics will arrange for transport of equipment to the patient prior to discharge.

(5) A permanent central venous access line/vascular access device (VAD) will be placed prior to discharge with documentation of its placement and readiness for use in CPRS.)

(6) The patient has received the prescribed HIT/infusion product to be administered at home prior to discharge and has not had complications. At least one therapeutic drug levels of those medications requiring such must be documented in the chart prior to discharge and prior to notification of pharmacy that HIT/infusion product is needed.

(7) Services required by the patient can be rendered on an intermittent or part-time basis at the patient's residence.

(8) Prior to discharge, the CHNC will document in the care coordination note confirmation of a verbal home assessment and that patient and/or caregiver education was completed. Pharmacy will cross reference this note prior to discharging the patient home on HIT therapy.

b. **The medical approval process is as follows**:

(1) Antibiotic Therapy - The Pharmacy Home IV Therapy consult must be completed by the treating provider with concurrence from an Infectious Disease Attending at least 24 hours prior to planned discharge. For antibiotics requiring administration more frequently than every 12 hours a CADD (continuous administration) pump will be utilized for administration. Treating provider will order pump from prosthetics at the John Cochran division and consult IV therapy to program pump and provide teaching on its use to the patient and caregiver.

(2) Parenteral Nutritional Therapy - Concurrence of the patient's PCP, as well as, the approval of the Nutritional Support Team (NST). Determination of which service/provider will be monitoring response to therapy will be documented in CPRS prior to discharge.

(3) Cancer Chemotherapy - Concurrence of the patient's PCP and a staff Hematologist/ Oncologist.

(4) Inotropic Therapy – Concurrence of patient's PCP and staff Cardiologist.

c. **The CHNC will make arrangements** and communicate the plan of care to a Medicare certified home health agency with consideration of the patient's agency preferences.

(1) In support of the provider and home health nurse, the CHNC may serve as a communication liaison for urgent clinical concerns and payment issues.

(2) The CHNC will ensure the appropriate Veterans Administration Medical Center (VAMC) clinical protocols are in the plan of care for each modality of HIT and that the assessment of the patient/caregiver/environment is supportive of HIT. To minimize risks of untoward events patients will not be discharged on home infusion therapy on weekends or holidays or without a 24 hour notice to ensure a safe discharge plan for the patient.

d. **The home health agency assumes responsibility** for the plan and provision of care.

(1) To observe and review appropriate administration/maintenance techniques the home health nurse will be present for the first home administration when feasible. Otherwise it is expected that the home health nurse will be present for the first administration the day after discharge to observe and review appropriate administration and maintenance techniques.

(2) The home health nurse is also responsible for the ongoing education and assisting, as clinically indicated, the patient with reconstitution, preparation, administration, maintenance and ensuring appropriate disposal of medical waste generated by therapy.

(3) The home health nurses are responsible for changing peripheral venous access lines, IV site dressing changes, coordinating times for solution pick up and/or delivery, drawing required blood specimens and reporting progress/problems appropriately to the PCP/monitoring provider(s).

e. **The patient/caregiver understands the procedure** and possible side effects of treatment and agrees to the treatment plan.

(1) The patient or caregiver is capable of providing the necessary care, including procedures, for safeguarding the patient during the treatment course. If the patient is incapable or lacks support, alternative arrangements must be considered. Discharge education will be verified and documented by the CHNC in the care coordination note and cross checked by pharmacy prior to discharge of patient.

(2) The patient/significant other must have access to a phone.

(3) The patient's residential environment is adequate and safe for patient and home health agency staff. Adequate conditions include electricity, refrigeration, clean area for preparation and administration, and safe storage.

(4) The patient and/or caregiver will receive training from the ward nursing staff on proper intravenous administration. The patient and/or caregiver will be able to perform a return demonstration prior to discharge. Ward staff will electronically document results of educational efforts and return demonstrations. If a patient/caregiver is unable to manage administration independently, alternative arrangements will be made by the treatment team. Ward staff will assure that patients take all IV infusion products, equipment and supplies upon discharge or that there are arrangements in place for any missing supplies/equipment to be provided to patient as soon as possible.

(5) Prior to discharge the dispensing pharmacist will review the patient record and confirm that the therapy is appropriate for the patient, appropriate education and environmental assessment has been completed, and appropriate concurrence of designated attending staff or support team has been obtained, and document this by adding comment on the Pharmacy Home IV Therapy consult.

(6) If it is felt at any time by any member of the discharge team, including the CHNC, that this is a potentially unsafe discharge, the charge nurse and medical team will be promptly notified.

f. **The VAMC will provide** the prescribed HIT chemical agents/infusion products and intravenous supplies.

g. **Conditions to Receive Specific Home Infusion Therapy**.

(1) Intravenous Antibiotics/Antivirals.

(a) All patients must be followed-up by Infectious Diseases. The frequency of clinic visits are individualized with the first clinic visit scheduled within two weeks after discharge.

(b) Weekly laboratory orders—Complete Blood Count (CBC) and pre-admission Comprehensive Medical Panel (CMP) will be drawn every Monday (except on holidays when it will be drawn on an alternate day). Lab orders for trough levels of vancomycin and aminoglycosides will be drawn twice weekly for one week, then once a week at least weekly until completion of antibiotic therapy or as ordered by the physician/provider. Other lab specimens will be collected as are appropriate and ordered. Lab results are faxed to 314-289-7007, c/o Infectious Disease Nurse Practitioner/Physician Assistant, with abnormal results called to Infectious Disease fellow.

(2) Total Parenteral Nutritional Therapy (TPN).

(a) The patient is a candidate for home parenteral nutritional therapy if he/she is in medically stable condition and does not require further acute in-hospital care. The patient's home environment and social support system must also be evaluated prior to acceptance for home parenteral nutrition therapy. Home parenteral nutrition is indicated

when the gastrointestinal (GI) tract is nonfunctional due to interruption in continuity or impairment in absorptive capacity. It is also required when there is a disruption in the ability to ingest oral foods or impairment in the upper GI tract.

(b) The provider, pharmacist, and dietitian will monitor labs and medication related issues.

(c) The NST will be responsible for recommending the appropriate parenteral nutrition formula and regimen and is also responsible for weekly monitoring and reformulation of the TPN solution.

(d) The home care nursing staff will be responsible for following therapy guidelines as outlined in the Standard Operating Procedure Chief of Staff (SOP COS) 11-088, "Total Parenteral Nutrition."

(e) All TPN must be administered via an infusion pump.

(f) Home Parenteral Nutrition Therapy monitoring will include:

1) Weekly assessment of physical status includes weight, signs/symptoms of infection, fluid status, vital signs and functional status.

2) The following labs will be monitored weekly, then every two weeks when stable; basic metabolic panel, magnesium, phosphorous, and liver panel. Serum triglycerides, CBC, and prothrombin time/International Ratio will be monitored once every four weeks when stable.

3) Assessment of compliance, independence, and adjustment to therapy.

4) Progress notes will be documented by the provider and forwarded to the NST for review. Questions, concerns, status/progress will be reported to the CHNC for proper follow-up/resolution and documentation when communications between the home health nurse and the provider need added attention.

(g) Termination of TPN should occur when either (1) the patient successfully transitions to enteral or oral feedings or (2) the risks of TPN outweigh the benefits.

(h) Patients must be seen in a VA outpatient clinic as determined by the provider.

(3) Antineoplastic and Other Hematologic/Oncology-related Medications Therapy.

(a) The home health nurse will obtain labs as prescribed in the plan of care and communicate results to the Hematology/Oncology provider.

(b) Patients must be seen in a VA outpatient clinic designated by the provider.

(4) Inotropic Therapy.

(a) The following clinical parameters will be assessed during each visit:

1) A thorough cardiovascular/cardiopulmonary assessment inclusive of weight, lung sounds, sitting/standing blood pressure, measurement of edema, jugular venous distension, paroxysmal nocturnal dyspnea, and orthopnea.

2) Assessment of activity tolerance, ability to perform activities of daily living and dyspnea on exertion.

3) Assessment of lab work as ordered, diet, and compliance with oral medications.

(b) Patients will be seen in the clinic setting as scheduled by their provider.

h. **Infection Control Practices for the Community Home Care Program**.

(1) Community Home Care Providers, VA or contracted agency staff, will perform hand hygiene according to SOP COS-11-031, “Hand Hygiene.” The home health agency should provide antimicrobial soap and/or alcohol-based foam/gel for use in the patient’s home.

(2) The contracted Community Home Health agency will provide and the Community Home Health Care provider will use the appropriate personal protective equipment (PPE) such as gown, gloves, and masks as may be needed to safely perform assigned tasks.

(3) Percutaneous injuries and other blood/body fluid exposures will be reported to the contracted home care agency and to the VA CHNC with Infection Control (IC) consultation as needed.

(4) Collected specimens will be handled so as to avoid spillage and breakage when collected and during transport to the testing laboratory. Gloves will be worn when specimens are collected. A small cooler with a closeable lit is recommended for transport of specimens.

(5) The home health nurse will assess the patient for indicators of infection with each visit and document the presence or absence of clinical sign and symptoms (S&S) in the appropriate agency format and with due regard to urgency when reporting finding to the PCP. Refer to Attachment A, “Indicators of Infection for Community and Home Based Primary Care” for specific assessment parameters.

(a) If a new signs & symptoms develop, especially indicators of sepsis in the presence of central lines, the home health nurse will notify the PCP, CHNC, and/or

VAMC Infection Control by fax (314.289.7007), phone call (314.289-7689) or pager (314.905.0997).

(b) The CHNC and IC will collaborate, as needed, including consulting Infectious Diseases (ID) and PCP regarding patient response to therapy.

(c) The Infection Control Practitioner/Professional will include such reports in routine surveillance presented at the Infection Control Committee meeting.

i. **Termination of Services**.

(1) Transition therapy, along the continuum, will be prescribed as clinically appropriate by the patient's VAMC PCP(s)—i.e., end of life planning.

(2) HIT service will be discontinued when the following criteria are met:

(a) The patient's provider has ordered to discontinue IV therapy.

(b) Treatment objectives are attained.

(c) The home health agency is no longer able to provide the services. The CHNC and/or PCP(s) will be notified.

(d) The patient enters a nursing home or is hospitalized. The home care nurse will notify the CHNC/provider if patient is admitted to a non-VA facility or non-contract VA nursing home.

(e) The patient and/or legally responsible party refused the services provided by a home health agency. The home health nurse will notify the CHNC and/or provider of the patient's or caregiver's refusal.

(3) DME provided by the VA will be returned to Prosthetics at the medical center by the patient or home health agency.

(a) Upon return, equipment will be placed in clear plastic bags and taken to Processing and Decontamination (P&D) for cleaning and disinfecting.

(b) After decontamination, biomedical equipment goes to the Biomedical Engineering Technician for calibration. The equipment is returned to P&D for reprocessing, then forwarded to Prosthetics for storage/distribution.

5. REFERENCES:

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c. Terry J. et al. Intravenous Therapy: Clinical Principals and Practice. Intravenous Nurses Society. 1995. W.B. Saunders: Philadelphia.

d. Joint Commission Accreditation Healthcare Organizations Standards Manual (current standards).

e. Hanchett, Marilyn. Visualizing the IV Fluid Path as an Emerging Concept in Infection Control. http://www.infectioncontroltoday.com/articles/421feat2.html

f. Centers for Disease Control and Prevention (CDC). 2002 Guideline for Prevention of Intravascular Catheter-Related Infections. MMWR. August 9, 2002 / 51(RR10);1-26. http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5110a1.htm

g. SOP-COS-11-088, “Total Parenteral Nutrition.”

h. SOP-COS-11-038, “Infection Control Guidelines for Intravascular (IV) Therapy.”

i. SOP-COS-11-031, “Hand Hygiene.”

j. VHA Directive 2004-059, Geriatrics and Extended Care (GEC) Referral"

k. American Society for Parenteral and Enteral Nutrition (A.S. P. E. N.) and American Dietetic Association (ADA). Standards of Practice and Standards of Professional Performance for Registered Dietitians (Generalist, Specialty, and Advanced) in Nutrition Support. *Nutr. in Clin. Pract*. 2007; 22(5): 558-586.

6. RESCISSION: SOP 11-082, “Guidelines for Home Infusion Therapy” dated July 30, 2001.

7. REVIEW DATE: January 26, 2012.

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